



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/652,694	08/31/2000	Paul S. Gryskiewicz	INTL-0447-US (P9445)	3816

7590 03/03/2005

Timothy N Trop
Trop Pruner & Hu PC
Ste 100
8554 Katy Freeway
Houston, TX 77024

EXAMINER

YENKE, BRIAN P

ART UNIT	PAPER NUMBER
----------	--------------

2614

DATE MAILED: 03/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/652,694

Applicant(s)

GRYSKIEWICZ, PAUL S.

Examiner

BRIAN P. YENKE

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Appeal Brief 15 March 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-11, and 14-16 is/are rejected.
- 7) ☒ Claim(s) 2,3,12,13,17 and 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. In view of the Supplemental Appeal Brief filed 15 March 2004 the examiner is withdrawing the previous Final Rejection and is providing a new Final Rejection, any inconvenience is regretted. The examiner is making the current rejection a Final Rejection based upon applicant's amending (31 March 2003/paper #4) of the original version of submitted claims.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,4-11 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (AAPA) in view of Michelson, US 5,406,311.

In considering claims 1 and 16,

a) the claimed scaling a first portion and a second portion of image information... is met by AAPA (Fig 4b/c) where horizontal scaling is performed wherein unscaled the horizontal portion (1st portion) would fill the first line memory 48 of memory 22.

Regarding the second portion, as disclosed by applicant digital video scalers can scale in the horizontal (1st portion) or vertical (2nd portion) direction in order to create an image

Art Unit: 2614

of a different dimension (page 1, para 1), thus the 2nd portion would be met by a scaler which performed conventional vertical processing in order to change the vertical resolution of an image.

However, AAPA does not disclose storing the scaled 1st and 2nd portion in the first memory area. As shown in Figs 4b/c the entire row of memory is not utilized (right column of memory 22).

Although it is conventional in the art to utilize the entire row of memory in order to overcome the wasting/non-use of memory. The examiner incorporates Michelson, US 5,406,311 which discloses storing a digitized stream of interlaced video into a memory in non-interlaced form. Michelson discloses that the length of the horizontal line is shorter than the page width where Michelson overcomes the wasting of any memory space/rows by writing the horizontal lines and portions of the horizontal lines, by filling the page rows of the memory (Fig 9).

Therefore, it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to modify AAPA which discloses scaling data both horizontally and vertically, by storing the scaled horizontal (first portion) and scaled vertical portion (second portion) in the first memory area in the event a source of pixel data is reduced from it's original size, which would prevent and eliminate any waste of memory space/rows.

In considering claims 4,
For limitations a-b, refer to claim 1 above. Referring to a memory controller, although AAPA does not specifically show a memory controller, the use of such a device is

Art Unit: 2614

notoriously well known in the art, as shown by Michelson, Fig 1, video memory controller 14.

In considering claim 5,

As disclosed by AAPA, the image information is a video data stream, being scaled by a digital video scaler.

In considering claim 6,

As disclosed by AAPA, the image information is a video data stream which inherently includes a plurality of frames and a predetermined number of bytes.

In considering claim 7,

As disclosed by AAPA when image information is scaled, the resolution of the signal is altered and hence the number of bytes of the image may be reduced.

In considering claims 8-11,

As disclosed by AAPA an adaptive video scaler scales both in the horizontal and vertical directions where the scaling operations are performed by a scaling ratio (1:1, 2:1, 4:1 etc...).

In considering claims 14,

AAPA discloses that a FIFO memory is conventional in the art (page 2, para 2).

In considering claim 15,

Neither AAPA nor Michelson discloses a memory which is an on-chip memory. However, the use of an on-chip memory is a device which is readily available/conventional in order to provide a user/designer the ability to communicate with outside devices/elements.

Art Unit: 2614

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify AAPA and Michelson which discloses the conversion of video data without wasting any memory space, by providing the user/designer the option of using an on-chip memory which would reduce the space/size of the system required for the memory.

Conclusion

Allowable Subject Matter

3. Claims 2-3, 12-13 and 17-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure—see newly cited references on attached form PTO-892.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2614

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Yenke whose telephone number is (703) 305-9871. The examiner work schedule is Monday-Thursday, 0730-1830 hrs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John W. Miller, can be reached at (703)305-4795.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703)305-HELP.

General information about patents, trademarks, products and services offered by the United States Patent and Trademark Office (USPTO), and other related information is available by contacting the USPTO's General Information Services Division at:

Art Unit: 2614

800-PTO-9199 or 703-308-HELP

(FAX) 703-305-7786

(TDD) 703-305-7785

An automated message system is available 7 days a week, 24 hours a day providing informational responses to frequently asked questions and the ability to order certain documents. Customer service representatives are available to answer questions, send materials or connect customers with other offices of the USPTO from 8:30 a.m. - 8:00p.m. EST/EDT, Monday-Friday excluding federal holidays.

For other technical patent information needs, the Patent Assistance Center can be reached through customer service representatives at the above numbers, Monday through Friday (except federal holidays) from 8:30 a.m. to 5:00 p.m. EST/EDT.

General information brochures can also be obtained in person from the Patent Search Room located in Crystal Plaza 3, Room 1A03, 2021 South Clark Place, Arlington, VA 22202.

The Patent Electronic Business Center (EBC) allows USPTO customers to retrieve data, check the status of pending actions, and submit information and applications. The tools currently available in the Patent EBC are Patent Application Information Retrieval (PAIR) and the Electronic Filing System (EFS). PAIR (<http://pair.uspto.gov>) provides customers direct secure access to their own patent application status information, as well as to general patent information

Art Unit: 2614

publicly available. EFS allows customers to electronically file patent application documents securely via the Internet. EFS is a system for submitting new utility patent applications and pre-grant publication submissions in electronic publication-ready form. EFS includes software to help customers prepare submissions in extensible Markup Language (XML) format and to assemble the various parts of the application as an electronic submission package. EFS also allows the submission of Computer Readable Format (CRF) sequence listings for pending biotechnology patent applications, which were filed in paper form.



BRIAN P. YENKE
Primary Examiner
Art Unit 2614



B.P.Y.

20 February 2005